

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 10885 (1984): Carbide Tipped Chucking Reamers with Morse Taper Shanks [PGD 32: Cutting tools]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

BLANK PAGE



Indian Standard

SPECIFICATION FOR CARBIDE TIPPED CHUCKING REAMERS WITH MORSE TAPER SHANKS WITH SHORT CUTTING EDGE

(Incorporating Amendment Nos. 1 & 2)

1. Scope — Covers the dimensions and requirements for carbide tipped chucking reamers with morse taper shanks.

2. Dimensions — Shall be as given in Table 1.

3. Tolerances — The tolerances of cutting length and overall length shall be as given below:

All dimensions in millimetres.

<i>Over</i>	<i>Up to and Including</i>	<i>Tolerance</i>
6	30	± 1.0
30	120	± 1.5
120	315	± 2.0
315	1 000	± 3.0

4. General Requirements

4.1 Bevel Lead Angle — 45°, shall be concentric with the diameter of reamer within 0.03 mm.

4.2 Back Taper — Reamers shall be provided with back taper on cutting diameter and the value shall be as given in IS : 10923-1984 'Technical supply conditions for carbide-tipped and solid carbide reamers'.

4.3 Flutes, unless otherwise specified shall be right-hand cutting with straight flutes.

4.4 The range of application of carbide shall be K10 according to IS : 2428-1964 'Application of carbides for machining, ranges of application and colour code'.

4.5 Carbide tips shall be according to IS : 9327-1979 'Dimensions for carbide tips for reamers, core drills, end mills and slot milling cutters'.

4.6 For requirements not covered in this standard, it shall conform to the requirements of IS : 10923-1984 'Technical supply conditions for carbide tipped and solid carbide reamers'.

5. Sampling — The sampling and criteria of acceptance shall be in accordance with IS : 7778-1975 'Methods for sampling small tools'.

6. Designation

6.1 A carbide tipped chucking-reamer with morse taper shank having diameter $d = 12.0$ mm, carbide tip having range of application K10, conforming to this standard and suitable for a hole with tolerance H8 shall be designated as:

CT Chucking Reamer 12.0 IS : 10885 K10

6.1.1 When the reamer is required for a hole with tolerance other than H8, and appropriate hole tolerance shall be included in the designation after size.

7. ISI Certification Marking — Details available with the Indian Standards Institution.

Adopted 18 April 1984

© BIS 2003

Price Group 1

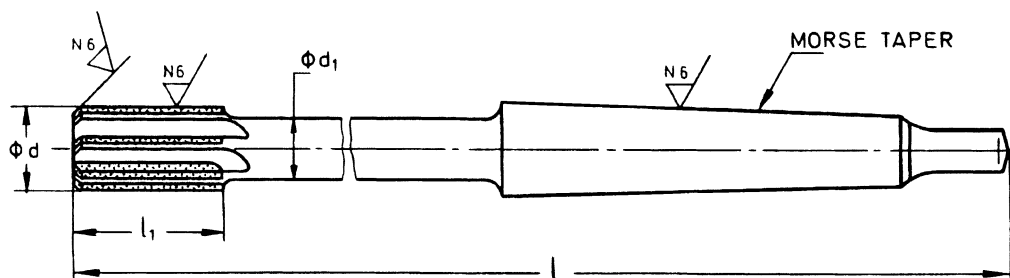
BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

TABLE 1 DIMENSIONS FOR CARBIDE TIPPED CHUCKING REAMERS WITH MORSE TAPER SHANKS

(Clause 2)

All dimensions in millimetres.

N 9 / (N 6 /)



d^* m 6	Range of Diameters		d_1	l	l_1	Morse Taper	Number of Flutes	Carbide Tip	
	Over	Up to and Including							
8	7.5	8.5	7.2	156	16	1	4	R16	
9	8.5	9.5	8.0	162	19			R19	
10	9.5	10.6	8.8	168	19				
11	10.6	11.8	9.8	175	19				
12	11.8	13.2	11.0	182	19				
(13)			11.0	182	19				
14	13.2	14.0	11.5	189	19	2	6	R22	
15	14.0	15.0	13.0	204	19				
16	15.0	16.0	14.0	210	22				
(17)	16.0	17.0	14.0	214	22				
18	17.0	18.0	15.5	219	22				
(19)	18.0	19.0	15.5	223	22				
20	19.0	20.0	17.5	228	22				
—	20.0	21.2	—	232	25				R25
22	21.2	22.4	17.5	237	25				
—	22.4	23.6	—	241	25				
(24)	23.6	25.0	21.5	268	25	3	8	R30	
25			21.5	268	25				
(26)	25.0	26.5	21.5	273	25				
28	26.5	28.0	23.0	277	30				
(30)	28.0	30.0	23.0	281	30				4
—	30.0	31.5	—	285	30				
32	31.5	33.5	28.0	317	30				
(34)	33.5	35.5	30.0	321	30				
(35)			30.0	321	30				
36	35.5	37.5	30.0	325	30	4	8	R30	
(38)	37.5	40.0	30.0	329	30				
40			30.0	329	30				

Note 1 — The figure is indicative of dimensions only and does not specify design features.**Note 2** — The values of d_1 are given for guidance only, but the neck diameter d_1 shall always be less than the cutting edge diameter d .**Note 3** — Sizes given within brackets are non-preferred.

*Recommended diameter.

EXPLANATORY NOTE

In the preparation of this standard, considerable assistance has been derived from DIN 8051-1979 'Maschinen — Reibahlen mit Mersekegelschaft mit schneidplatten aus Hartmetall mit Kurzem Schmeidteil'. (Machine-reamers with morse taper shanks with carbide tips, with short cutting part), issued by Deutsches Institut für Normung (DIN).

This edition 1.2 incorporates Amendment No. 1 (January 1987) and Amendment No. 2 (April 1991). Side bar indicates modification of the text as the result of incorporation of the amendments.